

In the Claims:

1. (Currently Amended) A wireless terminal, comprising:
a short-range communication module that is configured to communicate first information over a short-range wireless interface with a communication device;
a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol;
a processor that is configured to encode voice in the second information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec for transmission by the cellular transceiver according to a signal processing operation, and is configured to selectively encode voice in the first information using at least one of the EFR codec and the AMR codec for communication by the short-range communication module using the signal processing operation based on whether the communication device supports an enhanced communication mode.
2. (Original) The wireless terminal of Claim 1, wherein the short-range communication module is configured to communicate the first information according to a Bluetooth communication protocol.
3. (Currently Amended) A wireless terminal, comprising:
a Bluetooth module that is configured to communicate first information with a remote Bluetooth device; ~~and~~
a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol; and
a processor that is configured to encode voice in the second information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec for transmission by the cellular transceiver, and to selectively encode voice in the first information using at least one of the EFR codec and the AMR codec

for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode.

4.-6. (Canceled).

7. (Currently Amended) The wireless terminal of ~~Claim 4~~ Claim 3, wherein the first information comprises audio information, and wherein the processor is further configured to cancel ~~cancels~~ echo in the audio information using a signal processing operation.

8. (Currently Amended) The wireless terminal of ~~Claim 4~~ Claim 3, wherein the first information comprises audio information, and wherein the processor is further configured to reduce ~~signal processing operation reduces~~ noise in the audio information using a signal processing operation.

9. (Currently Amended) ~~The wireless terminal of Claim 4, wherein the A~~ wireless terminal, comprising:

a Bluetooth module that is configured to communicate first information with a remote Bluetooth device;

a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol and;

a processor that is configured to convolutionally encode the second information for transmission by the cellular transceiver according to a signal processing operation, and to selectively convolutionally-~~codes~~ encode the first information according to the signal processing operation for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode.

10. (Currently Amended) ~~The wireless terminal of Claim 4, wherein the A~~ wireless terminal, comprising:

a Bluetooth module that is configured to communicate first information with a remote Bluetooth device;

a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol and;

a processor that is configured to interleave the second information over time for transmission by the cellular transceiver according to a signal processing operation, and to selectively interleave[[s]] the first information over time according to the signal processing operation for communication by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode.

11. (Currently Amended) A wireless terminal, comprising:

a Bluetooth module that is configured to communicate first information with a remote Bluetooth device;

a cellular transceiver that is configured to communicate second information with a cellular network according to a cellular communication protocol; and

a processor that is configured to encode the second information for transmission by the cellular transceiver using a signal processing operation, and configured to selectively encode the first information according to the signal operation for transmission by the Bluetooth module based on whether the remote Bluetooth device supports an enhanced communication mode. The wireless terminal of Claim 3 wherein the processor is configured to selectively encode the first information by selectively embed-embedding control data in the first information based on whether the remote Bluetooth device supports an enhanced communication mode.

12. (Original) The wireless terminal of Claim 3 wherein the remote Bluetooth device comprises a cordless telephone base station that is configured to be connected to a public switched telephone network (PSTN), and wherein the processor is configured to communicate through the Bluetooth module with the cordless telephone base station.

13. (Currently Amended) The wireless terminal of Claim 12, wherein the processor is configured to selectively embed control data in the first information based on whether the remote Bluetooth device supports an enhanced communication mode, and wherein the control data comprises a command to control operation of ~~for~~ the cordless telephone base station.

14. (Original) The wireless terminal of Claim 13, wherein the control data instructs the cordless telephone base station to terminate a call on the PSTN.

15. (Currently Amended) A method of operating a wireless terminal, comprising:

determining whether a remote Bluetooth device supports an enhanced communication mode;

selectively encoding voice in first information using at least one of an Enhanced Full Rate (EFR) codec and an Adaptive Multi-Rate (AMR) codec according to a signal processing operation for communication to the remote Bluetooth device based on whether the remote Bluetooth device supports an enhanced communication mode; and

communicating the first information to the remote Bluetooth device.

16. (Currently Amended) The method of Claim 15, further comprising:
encoding voice in second information using at least one of the EFR codec and the AMR codec according to ~~[[a]]~~ the signal processing operation for transmission to a cellular network;

~~selectively encoding the first information according to the signal processing operation for transmission to the remote Bluetooth device based on whether the remote Bluetooth device supports an enhanced communication mode.~~

17. (Canceled).

18. (Canceled).

19. (Currently Amended) The method of Claim 16, wherein the first information comprises audio information, and further comprising selectively encoding the first information according to the signal processing operation comprises canceling echo in the audio information.

20. (Currently Amended) The method of Claim 16, wherein the first information comprises audio information, and further comprising selectively encoding the first information according to the signal processing operation comprises reducing noise in the audio information.

21. (Currently Amended) ~~The method of Claim 16, wherein selectively encoding the first information according to the signal processing operation comprises~~
A method of operating a wireless terminal, comprising:

determining whether a remote Bluetooth device supports an enhanced communication mode;

selectively convolutionally coding the first information for communication to the remote Bluetooth device based on whether the remote Bluetooth device supports an enhanced communication mode; and

communicating the first information to the remote Bluetooth device.

22. (Currently Amended) ~~The method of Claim 16, wherein selectively encoding the first information according to the signal processing operation comprises~~
A method of operating a wireless terminal, comprising:

determining whether a remote Bluetooth device supports an enhanced communication mode;

selectively interleaving the first information over time for communication to the remote Bluetooth device based on whether the remote Bluetooth device supports an enhanced communication mode; and
communicating the first information to the remote Bluetooth device.

23. (Currently Amended) ~~The method of Claim 15, further comprising A~~
method of operating a wireless terminal, comprising:

determining whether a remote Bluetooth device supports an enhanced
communication mode;

selectively embedding control data in the first information for communication to the remote Bluetooth device based on whether the remote Bluetooth device supports support an enhanced communication mode; and
communicating the first information to the remote Bluetooth device.

24. (Currently Amended) The method of ~~Claim 15~~ Claim 23, wherein the remote Bluetooth device comprises a cordless telephone base station that is configured to be connected to a public switched telephone network (PSTN), and communicating the first information to the remote Bluetooth device comprises communicating the first information to the cordless telephone base station.

25. (Canceled).

26. (New) The method of Claim 24, wherein the control data selectively embedding in the first information comprises a command to control operation of the cordless telephone base station.